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Quarantine and Sanitation

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QUARANTINE AND SANITATION.

It will be my purpose in this article, first, to show that sanitation receives its primary impulse from quarantine, and follows it in natural sequence, whether considered from a local, municipal, State, or national point of view, and, second, to discuss the proper field of operation to be covered by local, municipal, State, and national authority. All are doubtless familiar with the quarantining of a room wherein a case of measles or scarlet fever is confined, or of a house whose front door is placarded with a warning on account of scarlet fever, diphtheria, or small-pox. Many, also, have observed the precautions taken to prevent the spread of typhoid fever; including, under municipal regulation, not only the disinfection of dejecta, but the examination of drains and sewers and the closing of infected wells, the source of water-supply, by local boards of health. The step from quarantine to sanitation here is a short one.

Now, while there are some who seem to think that these measures—affecting so closely the individual—should be supervised by a great central bureau, they are at present, and always should be, under the direct control of local or municipal governments, which are as capable to manage these matters as they are to manage their police and fire departments. The general sanitation of towns and villages, including systems of sewerage, disposal of garbage, water-supply, house draining and plumbing, ventilation of school-houses and other buildings, examination of the milk-supply, proper disposal of the dead, enforcement of the disinfection of dwellings after the ordinary contagious diseases, such as scarlet fever and diphtheria,—all these and many other functions of like character are matters with which the United States Government, under the Constitution, has nothing to do; and they properly belong to municipal governments, which derive their charters from their respective States.

Anyone consulting the annual reports of the health departments of our leading cities will be impressed with the care and labor bestowed on their work; but the operations of these departments would be better and more easily accomplished if there were a stronger sentiment of approval and endorsement by the people. Just as all governments derive their just powers from the consent of the governed, so sanitary regula-

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tions may be taken as an index of the desire of the people; and it may almost be said that the degree of prosperity, cultivation, and refinement of any city is indicated by the care which is given to the enactment and enforcement of its sanitary regulations. This demonstrates the necessity, on the part of the people, of upholding the hands of physicians and others who are engaged in work pertaining to the public health, the suppression of contagious diseases, and the enforcement of necessary sanitary measures. It is the duty of the general practitioner, whose relations are more intimate with the people than those of the health officer, to cultivate a sentiment of respect for the efforts of the latter; for it is from the people that the sanitarians must derive their power for good. General practitioners should take an interest in the labors of these their *confrères*, as well as in the formation of local boards of health, in order that good men may be appointed; and all their influence—professional, political, and social—should be given to the support of these boards and their officers. A strong public sentiment should be encouraged, to the end that municipal cleanliness may rank as one of the foremost features of municipal government.

One of the most notable events of the past decade was the review in New York city, some two or three years ago, by the Mayor and other officials of the metropolis, of its neatly uniformed street cleaners,—the “Waring Brigade” as they were called,—organized and conducted by that eminent promoter of sanitary reform, Col. George E. Waring, Jr., who recently sacrificed his life in the performance of his duties as a public sanitarian. His conduct of his army of street cleaners really marked an epoch in municipal sanitation in the United States; and the example set by him has been followed in a number of other cities, where the so-called “White Wings” may now be seen at work.

STATE BOARDS OF HEALTH.

Now, there are some questions of sanitation concerning which municipal authority finds itself deficient in legal power, or as to which there is doubt regarding the expenditure of municipal funds,—questions involving the relations of one municipality to another, and requiring consideration by some official body representing the authority of the State. Nearly every State, therefore, has its board of health, to act where municipal authority fails, to harmonize conflicting interests, to encourage local boards and to exercise supervision over them, while allowing each independence of action to fulfil without restraint its local functions.

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The State organization is the medium through which relations are sustained with other State organizations and with the National Government. Every encouragement should be given to the development and perfection of the State boards of health; and the legislatures of the respective States should be liberal in their endowments.

To show the sequence of public health service to quarantine, it may be mentioned that the first State boards of health were organized largely on account of the quarantine service, and only subsequently developed their other and more appropriate functions. With the development of national quarantine their quarantine functions have become less important; and with the perfection of national quarantine their maritime quarantine functions should be entirely removed. Maritime quarantine is a function of the Treasury Department of the National Government; and its exercise by State or local health organizations diverts the efforts of these bodies from what should be their essential functions. For example, until about a year ago the so-called Louisiana State Board of Health was little more than a quarantine board for New Orleans, with no authority whatever in the parishes of Louisiana. Divest the State boards of their maritime quarantine duties, and they will devote themselves to their legitimate ends; such as the perfection of morbidity and mortality records throughout the State, sanitary engineering, filtration of water-supplies, suppression of the ordinary epidemic diseases, the development of laboratories, the suppression of quackery, the supervision of the practice of medicine, and the management of State hospitals and of State institutions for the care of the poor and the insane.

The question of smallpox in the United States is illustrative of the foregoing. It is evidently the duty of each State to suppress this disease within its borders; and most States do give it the attention it deserves. But there are other States which, either through faulty organization or because their legislatures do not appropriate the necessary funds, are powerless to suppress this disease; and, since its prevalence endangers neighboring States, the National Government is obliged occasionally to take charge of local epidemics. Some of the most strenuous opponents of national maritime quarantine have been certain health officers who have been utterly unable to suppress smallpox raging within their jurisdiction; and the rather remarkable situation has been developed of appeals being made by the mayors and local boards of health urging the Marine-Hospital Service to suppress smallpox in States whose health officers have been most pronounced in decrying so-called Government interference in maritime quarantine.

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Smallpox is so easily prevented by vaccination that one afflicted with it meets with scant sympathy; and the improvements in the preparation of pure vaccine lymph have been so great that the fear of untoward results from vaccination is unwarranted. Further, the spread of smallpox is so easily prevented, under proper and vigorous management, that it is discreditable to any State or locality to allow the disease to get beyond control. If the inability to manage it is due to a want of funds, then this lack is discreditable to the legislative bodies of the infected States or localities. The Marine-Hospital Service has suppressed a number of local epidemics of smallpox, and is ready at all times to send expert assistance to advise in preventive measures; but operations involving the expenditure of money are undertaken only when necessary to prevent the spread of the disease from one State to another.

The above remarks demonstrate clearly, to my mind, both the important functions of local boards of health and the necessity of developing and strengthening the State boards of health.

NATIONAL QUARANTINE AND SANITATION.

Now, maritime quarantine, as a national function, is maritime sanitation, and is intimately connected with the sanitation of seaports. It is the sanitation of ships, of merchandise, and of personal effects. In interstate quarantine it is the sanitation of common carriers, merchandise, and personal effects; and, as illustrating its intimate association with the sanitation of towns, reference may be made to post-epidemic disinfection by the Marine-Hospital Service of towns and cities in the South after the yellow fever epidemic in Jacksonville, Florida, in 1888, in Brunswick, Georgia, in 1893, and in the States of Alabama, Mississippi, and Louisiana in 1897. As a quarantine measure, too, it will be the duty of the present Government to insist on the sanitation of Havana and other Cuban cities, and, in due time, of every city in the western hemisphere which is known as a yellow-fever-breeding port. These matters should be, and are, the care of the National Government; the Marine-Hospital Service being charged with the duty of preventing, through the operations of the national quarantine law, the introduction of disease from foreign lands.

Until 1893 there was, properly speaking, no national system of quarantine. All previous legislation had required only that assistance should be given to State or local quarantines; and each State and locality had its own quarantine requirements,—some good, some bad, some made

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strict enough to keep out disease, and others purposely weak, to attract, as it were, commerce to a more favoring port. At least half a dozen conventions were held by State health authorities, both before and after the War of the Rebellion, to bring about uniformity; but all efforts failed until Congress enacted the law of 1893. This was a great advance in national quarantine; and under its provisions regulations have been promulgated. But the law requires a demonstration of inefficiency of management on the part of the local authorities before the National Government can assume control at a given port. This demonstration of inefficiency is precisely what should not be allowed. The law requires the Government to aid State and local authorities in the execution of their own regulations, which are sometimes unwise. It should require the local authorities to aid in the execution of the Government regulations. It does not provide that, when the national quarantine officer has inspected a vessel, such inspection shall be final; nor does it provide penalties for the infraction of the national regulations.

These are the defects which are sought to be remedied by the Bill introduced into the Senate by Mr. Caffery (S. 2680) and in the House of Representatives by Mr. Hepburn (H. R. 4363). This Bill provides, also, that during yellow fever epidemics the President may prohibit travel and traffic, except under safeguards imposed by national authority. At the same time, to obviate interference, by unreasonable local quarantines, with commerce and mail passing from one State to another, it grants authority for travel and traffic after application of the necessary sanitary measures. The Bill has received the endorsement of the Secretary of the Treasury, and has been reported on favorably by the committees of the Senate and of the House, the House Committee having given hearings on it extending over two or three months. With regard to maritime quarantine, the Bill, which is simply an amendment to the present law, makes the national regulations paramount. Maritime quarantine is a regulation of commerce over which, under the Constitution, the National Government has absolute control; and it naturally belongs to that department of the Government invested with the power of regulating commerce in other respects. It is a function of the Treasury Department.

The Treasury Department has charge of the registry of all merchant vessels of the United States; inspects their hulls, boilers, and machinery; determines the number of passengers that may be carried; provides for the housing and rations of the crews; examines pilots on American vessels before granting them licenses; supervises immigration; enforces

navigation laws; aids vessels in distress through its revenue-cutter service; provides lighthouses, and marks the channels with buoys; makes the soundings and furnishes the charts of our coasts in further aid of vessels; and provides for the sick and injured of the merchant marine. Why then should it relegate to a State or local authority the sanitary inspection of a vessel on its arrival, or the power to determine whether the people and merchandise on these vessels, destined to all points in the United States, shall be permitted to enter with or without detention?

Maritime quarantine actually begins in foreign ports. Under our present law, the United States consul—a government official—issues a bill of health. In times of danger medical officers of the Marine-Hospital Service are detailed to serve in the office of the consul to enforce the Governmental health regulations; and immigrants arriving on this side are by law required to be examined by medical officers of the Marine-Hospital Service, to prevent their bringing contagious disease. These provisions are in themselves national quarantine. Prior to 1891 the surveillance over immigration was left to State commissioners at the several ports: but in that year Congress placed the whole matter in charge of the Treasury Department; and no one will deny the benefits resulting from the change.

Notwithstanding the above argument, the quarantine Bills introduced into Congress, and already referred to, do not abolish or interfere with efficient State or local quarantine establishments. They require simply that these establishments shall execute the national regulations; and it is only in the event of inefficiency that the Government intervenes. They enable the Government to establish quarantines at places where they are deemed necessary by the Secretary of the Treasury.

In addition to the twelve national quarantine stations operated by the Government, there are a number of State quarantines well equipped and conducted. Some of these, as at Boston and New York, have been established at great expense, and are efficiently equipped; and the quarantine Bills referred to do not disturb them, leaving it to the discretion of the municipal governments themselves to determine when they may choose to be added to the national quarantine stations. Overtures have been made by certain quarantines to this end, inasmuch as a national station is supported by a Congressional appropriation, and relieves the shipping of the port of quarantine fees.

Now, there is annually introduced in Congress some Bill looking to the establishment of a new bureau of public health; the authors laying stress upon the name of the Marine-Hospital Service as not indicating

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any public health functions, and claiming that it was originally established for the relief of sick and disabled seamen of the merchant marine. This latter statement is true. But the service was established a century ago; it is now in its centennial year; and during the past one hundred years it has grown, just as other branches of the Government have grown. During my twenty-two years' connection with the Service I have seen many important functions added to it. The fact that it has the care of twenty marine hospitals and of one hundred and fifty other relief-stations, with a corps of seventy-eight commissioned officers and one hundred and thirty-six non-commissioned officers, specially trained in the performance of duties akin to those of quarantine, is considered to be, instead of an objection, an additional reason why the Service should be charged with quarantine duties. Nevertheless, these Bills to establish a new bureau of public health, providing as they invariably do for large representation from the States and local governments, naturally receive the endorsement of such bodies.

Another contention is, that what is needed is sanitation and not quarantine. Yet, with strange inconsistency, two-thirds of the provisions of these Bills always relate to quarantine; taking it out of the hands of the Marine-Hospital Service, although the latter has had the management of it, so far as national law permitted, since 1878, with the exception of four years (1879 to 1882), during which a national board of health was in operation by Act of Congress. This board, however, was discredited and discontinued by Congress. Some of those most earnest in accomplishing its downfall are now the advocates of a similar board. The Marine-Hospital Service, despite its name, has continued to exercise quarantine and other functions, and has been the only medium through which real progress in the matter of national quarantine has been accomplished. The so-called public health Bills are retrogressive in this respect, as they are necessarily framed with a view to securing the assistance of local quarantine authorities in their passage.

The Marine-Hospital Service has simply executed to the best of its ability the duties imposed upon it by Acts of Congress; and in the report of a committee on a department of public health presented to the American Medical Association in May, 1896 (which report was adopted), the declaration was made that the Marine-Hospital Service

"was, by the Act of 1893, converted into a national health department, with very large and far-reaching powers and abundant means. It is not called a department of public health, but is a department of public health in fact."

In a letter to the Chairman of the Committee on Interstate and For-

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eign Commerce of the House of Representatives, January 3, 1894, the Secretary of the Treasury, commenting on one of these Bills to establish a bureau of public health, said :

"The Bill does not establish a bureau of public health, as that term is generally understood, or, if it does, then a bureau of public health already practically exists in the Marine-Hospital Service, which is now exercising every essential function that is provided by the Bill."

In illustration of this statement, I shall only briefly allude to measures other than quarantine and marine-hospital relief which are receiving the attention of the Service. These are special investigations in the perfectly equipped laboratory of the Service into the causes and nature of disease; a commission appointed by the President to investigate yellow fever in Havana; the weekly publications of the bulletins of public health; and investigations of the pollution of water-supplies and of the prevalence of leprosy. Bills specially authorizing these last two measures are now before Congress.

To enumerate the steps now being taken to prevent the introduction from abroad of contagious diseases would extend this article beyond its proper limit; but it may be said that very unusual measures are now being perfected with regard to the prevention of the introduction of yellow fever next summer. Quarantine measures, as stated at the outset, are followed in close sequence by sanitation; and, in the efforts to prevent an invasion of yellow fever, the Government is not losing sight of the necessity of sanitation in Cuban seaports.

There is little doubt that, with American predominance in the Island of Cuba, the dreaded scourge of yellow fever will be suppressed and will, in course of time, almost, if not entirely, disappear. But a still further advance should be made. That great pestilential centre, Havana, even if purified and freed from yellow fever infection, will still be subject to reinfection from other ports in Central and South America, which are in almost as bad a condition. It is, therefore, worth serious consideration whether anything less than the total elimination of yellow fever from the American continents should be attempted; and it should be remembered that this disease is practically limited to the western hemisphere.

It is not pure optimism to suppose that an international sentiment may be awakened which will cause yellow fever in a given port, and the faulty sanitation which it implies, to be an opprobrium upon the Government in possession of the offending port. Every nation should be held responsible for conditions, within its borders or dependencies, tending to propagate epidemic diseases and to threaten other nations

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with which it expects to maintain a friendly commerce. As soon as the cities of our own dependencies are freed from fever by sanitation, it would be appropriate for this Government to invite in convention representatives of each of the other American republics; the convention to be composed of public sanitarians, civil engineers, and financiers, whose duty it should be to prepare a treaty providing for the examination of the chief yellow fever ports by a commission representing the republics concerned. Each country should obligate itself to put into effect the measures recommended by this commission, or measures of its own which should meet with the commission's approval.

Since obligations without penalties would be worthless, the treaty should provide that if, after a sufficient time, these improvements are not made, each of the other nations interested should impose such discriminative tariff or tonnage tax or quarantine restraints upon the offending nation as would cause it in its own interests to comply with the terms of the treaty. Provision might also be made in the treaty that if, by chance, the necessary funds were lacking, a loan to provide them should be raised by *pro rata* assessment upon the other countries. This suggestion may seem to some impracticable; yet, when one reflects upon the constant dread, the great mortality, the burdensome restraints on vessels and persons, and the destruction of commercial prosperity, caused by this Western pest, no effort to suppress it can be considered too great. I am assured by those who are intimately associated with the representatives of the Central and South American republics in Washington that the plan is by no means impracticable, but is rather one which, if the initiative be taken by the great Republic of the United States, will be gladly and quickly entered into by the other republics of the western hemisphere.

It could be shown, in favor of such a treaty, how greatly it would benefit each of the countries entering into it, by relieving their commerce from present burdensome and expensive quarantine restrictions. Its effect would be far-reaching, and would mark an epoch in the matter of health laws and sanitation; for the improvement of harbors and cities, to prevent yellow fever, would bring corresponding improvement with regard to other diseases and would give an impetus to municipal sanitation everywhere. It would also have the effect of bringing closer together, commercially and socially, the great cities on this side of the Atlantic; so that we should feel a common friendly interest in freeing our commerce, our harbors, and our towns from this common enemy.

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